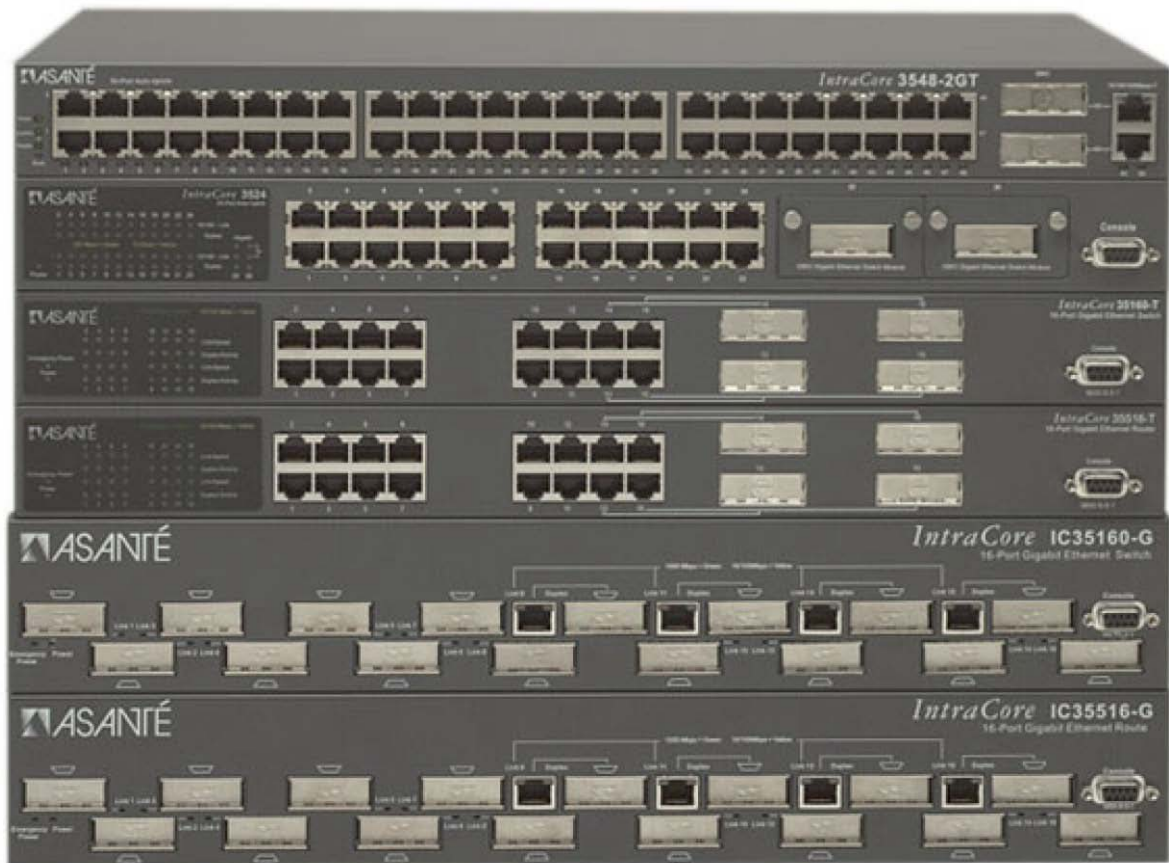# IntraCore®

Intelligently Designed Gigabit Switches

From top to bottom: IC3548-2GT, IC3524-2G, IC35160-T, IC35516-T, IC35160-G and IC35516-G

"Initial configuration via the IntraCore's command line interface is simple; we got the switch up and running in minutes. **Its web interface is fast, organized, and easy to navigate**. And its

> port-based flow control with eight priority levels and easy-to-set MAC address-based security helps keep network intruders at bay."

PC MAGAZINE "Initial configuration via the IntraCore's command line interface is simple; we got the switch up and running in minutes. **Its web interface is fast, organized, and easy to navigate.** And its port-based flow control with eight priority levels and easy-to-set MAC address-based security helps keep network intruders at bay."

IntraCore 35160 as reviewed in *PC Magazine*, May 2003

PRODUCT LINE GUIDE

Rock Solid Reliability

Managing an enterprise network can be a thankless job. When everything's working like a well-oiled machine, it's easy to overlook the results of your detailed planning, intelligent network architecture and flawless execution. However, once a high-profile user runs into a problem—expect your phone to be ringing until the issue is resolved to his satisfaction. From the small remote office to the multi-thousand node campuses, our customers have depended on Asante networking products to perform flawlessly, 24/7 for the past 15 years.

Intelligently Designed

Pick any IntraCore switch and you'll see why Asante is the choice for demanding users—and network managers. Take our IC35160-T, a 16-port Gigabit Ethernet switch. Each RJ45 port not only handles up to 2000 Mbps (1000 Mbps transmit, 1000 Mbps receive) at wire speeds with no blocking, they also support **Auto-Uplink™** (AU) so common wiring mistakes, like crossover (MDI-X), can be quickly detected and *automatically* fixed.

Ports 13-16 are special on the IC35160-T. Each is paired with an industry-standard GBIC port to accommodate a fiber Gigabit module (1000BaseSX or 1000BaseLX). For greater reliability, run both copper (RJ45) and fiber (GBIC) cables to the same port numbers; in the event of a fiber link failure, the IntraCore switch's **Auto-Failover™** (AF) service will immediately route traffic to the copper port.

The front-mounted console port is handy for initial configuration (setting up the unit's IP address, password, etc.) and troubleshooting. On the rear, a port accepts an **emergency power supply** (EPS) module for instant failover should the internal power supply fail.

Student-Proof Security

Employees are generally friendly, but IntraCore switches have been installed in numerous schools and universities where students regularly test Asante's **integrated security suite** (ISS) against unauthorized users and even malicious tampering. Each security policy can be individually enabled. Integrated reports quickly produce alerts and graphs to isolate potential trouble spots. If Asante can keep students from logging on to a faculty network and changing their grades, imagine the piece of mind we can provide for your network.

Features and Benefits

As a pioneer of multiplatform hubs and switches, IntraCore switches form a complete solution for the most demanding network environments. Here's why

so many organizations choose Asante for their business-critical networks.

IntraCore Highlights

► Enterprise Class Feature Set
Supports industry-standard enterprise management capabilities. 802.1q, VLANs, SNMP, Telnet, RMON and more.
Benefits: IntraCore switches are easy to deploy in large enterprise and campuses.

► Supports Data, Voice and Video over Ethernet/IP
Includes the capability to deliver voice over IP and video over IP using 802.1p Quality of Service and IGMP Multicast Pruning.
Benefits: The switches you install today for your data network can also be used for advanced voice and video applications in the future.

► Just One Vendor for Layer 2 Switching, Layer 3 IP Routing and 802.11b/g Wireless Networking
Asanté provides a complete solution for your networking needs.
Benefits: Just one vendor for sales and technical support. Avoid "finger pointing" between multiple vendors.

► Unified 802.1x Authentication for Wireless and Wired Users
With 802.1x and a RADIUS authentication server, you can restrict network access only to authenticated wireless and wired users through an IntraCore 35160 Series switch.
Benefits: Control user access—not just network ports.

► Simplified Troubleshooting
All IntraCore switches track both the IP address and physical switch ports. To locate a target device, the switch's management utility identifies the physical port—not just the MAC or IP address. You can even locate multiple devices with duplicate IP addresses.
Benefits: Quickly identify and locate devices on your physical network.

► Easily Manage Large Installations
Perform scheduled maintenance on hundreds of IntraCore switches using the Asanté Enterprise Device Manager. This Windows-based utility handles image code updates, configuration file

backups and even inventory management.
Benefits: Save time by scheduling remote maintenance tasks for all IntraCore switches.

► Simplified Parts Sparing

For mission-critical networks, just keep a few Asanté IntraCore switches and GBIC modules on-site. In the unlikely event of a failure, you can immediately swap in a replacement unit. Many parts (esp. GBICs, fiber ports and redundant power supplies) are common to all IntraCore switches—minimizing the number of extras you'll need to keep.
Benefits: Minimize downtime and on-site spares inventory.

► Low-Cost, Redundant Power Supply

IntraCore 3548/35160/35516 switches all support an external power module to provide non-stop service in the unlikely event of a main power supply failure. This is especially important in aggregation switches and edge switches that support voice services over Ethernet/IP.
Benefits: Minimize downtime and improve network uptime.

► Consistent Management Interfaces

All IntraCore Layer 2 switches (3524, 3548, 35160 Series) share the same telnet, web, console, RMON and SNMP management interfaces.
Benefits: Learn to manage one IntraCore switch and you're ready to manage all the rest.

► Consistent Gigabit Ethernet Fiber Interfaces

All IntraCore switches support the same industry-standard Gigabit Interface Converter (GBIC) module with the same SC-type connectors. IntraCore switches can accept other GBIC modules and most other switches can also use the Asanté modules.
Benefits: Mix and match the exact GBIC modules for single mode or multimode fiber.

► IntraCare 3 Year Service—Included!

Every IntraCore switch is backed by Asante's best warranty, support and service package. Everything is covered (including toll-free telephone technical support and software updates) for three full years.
Benefits: Save your money; no need to purchase an expensive support contract.

► Outstanding Value

Asanté's total cost of ownership is second to none. Not only are the initial acquisition costs low, 3 years of IntraCore services (included) represents and excellent value. Asanté prices are typically 50% (or more) lower than similar equipment from Cisco Systems and others.
Benefits: Get exactly what you need at a price that fits your budget.

Layer 3 Highlights

► Wire-Speed IP Routing

Receive, evaluate and route IP packets between subnets at the fastest speeds.
Benefits: Your network core operates at the fastest possible speeds.

► Industry-Standard Layer 3 Routing/Filtering

Complete feature set includes OSPF, DVMRP, VRRP for standards-based routing.
Benefits: IntraCore 35516 switches/routers can easily co-exist in a multi-vendor, standards-based environment.

Flexibility to Meet Your Changing Needs

Your network may be running flawlessly today, but can you be certain that it has the capability to meet the changing needs of your users? IntraCore switches support a rich set of multi-services for multimedia—perfect for voice/IP and even video/IP.

Model	Gigabit Ports	1000BaseT Ports	GBIC	10/100 Ports	Switching	Reliability and Security
IC35516-T	16	16	4	--	Layer 3/4	AF, AU, RPS, ISS
IC35516-G	16	4	16	--	Layer 3/4	AF, AU, RPS, ISS
IC35160-T	16	16	4	--	Layer 2	AF, AU, RPS, ISS
IC35160-G	16	4	16	--	Layer 2	AF, AU, RPS, ISS
IC3548-2GT	2	2	2	48	Layer 2	AF, RPS, ISS
IC3524 Base	Optional (2)	Optional	Optional	24	Layer 2	ISS
IC3524-2T	2	2		24	Layer 2	ISS
IC3524-2G	2		2	24	Layer 2	ISS

AF (Auto-Failover), AU (Auto-Uplink), RPS (Redundant Power Supply), Integrated Security Suite (ISS)

Asante IntraCore switches deliver a rich feature set, high performance and low cost of ownership.

- Standards-based solution for enterprise (LAN edge) and medium-sized organizations (core and edge).

•Full-featured, high performance design that's build for converged telephony, video and data networks.

•Maximum configuration flexibility for the right mix of port counts, media type and bandwidth.

•Lowest cost of total ownership. Consider the lifecycle cost: acquisition, expansion, and maintenance (web-based management tools and IntraCare™ three-year warranty and technical support).

Choose the IntraCore switches with the switching and port configurations that best fit your application.

Layer 3/4: IC35516 Series 16-Port Gigabit Ethernet
Asante's most versatile Gigabit Ethernet switch is ideal for your network core. With wire-speed performance, you can depend on the IC35516's 32 Gbps switch fabric to efficiently route traffic between

multiple subnets.
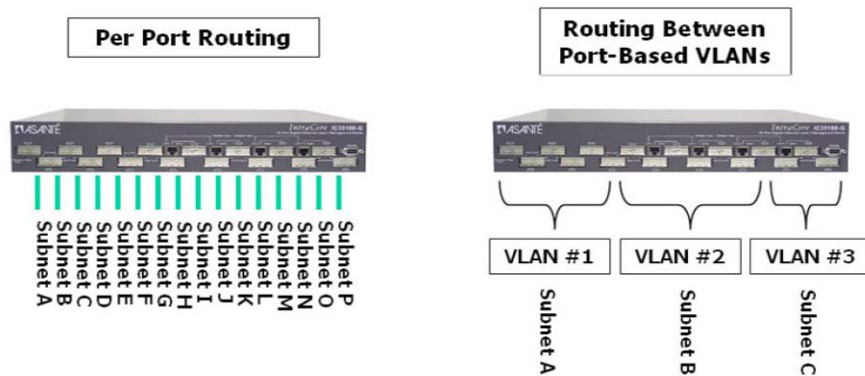
The IC35516 can support both per-port routing and routing between VLANs

Routing between 802.1q VLANs

Highlights:

- Single chip design for Layer 2 switching, Layer 3 IP routing and L2-4 packet Filtering.

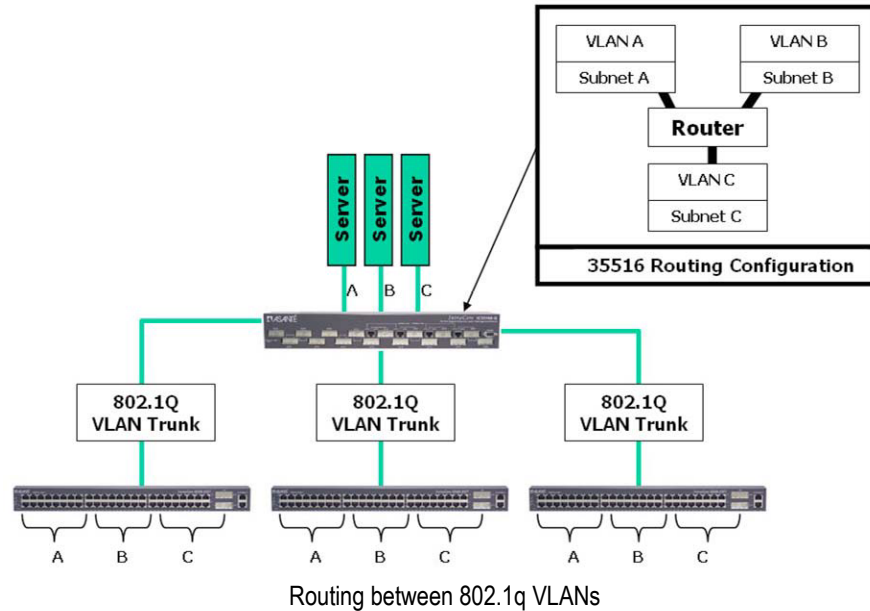- Choice of two configurations with 1000BaseT (copper) and GBIC (fiber or copper).

- Jumbo packets (up to 32 KB)

- Supports Layer 3 routing for IP with router standby protocol, router discovery protocol, RIP I/II, OSPF, including static route table (insertion/deletion) and Layer 3 IGMP multicasting.

- Deploy multimedia services (voice, video, audio, telephony) throughout your network with multi-service technologies: IP multicast with IGMP for up to 2048 multicast groups.

- Maximum number of IEEE 802.1p priority queues: 8 per port. This advanced QoS software option is ideal for sophisticated Ethernet service, including multi-tenant unit (MTU) installations.

- 4000 virtual LANs supported with IEEE 802.1Q tagging.

- Optional redundant power supply (RPS).

IC35160 Series 16-Port Gigabit Ethernet
The IntraCore 35160 Series is Asante's most powerful Layer 2 backbone, core and distribution level aggregation switches. Tailor this IntraCore switch with hardware and software to precisely match your network needs—today and in the future.

Deploy voice/IP, video/IP and audio applications requiring Quality of Service (QoS) throughout your network with multicasting technologies: IP multicast with IGMP, manual population of multicast tables and IEEE 802.1p priority queues.

```
IntraCore 3524 Configuration Menu

<Cmd>      <Description>
  a        System Administration Configuration
  i        System IP Configuration
  b        Bootstrap Configuration
  n        SNMP Configuration
  p        Port Configuration
  s        Spanning Tree Configuration
  d        Unicast Forwarding Database Configuration
  t        Security Management
  v        VLAN Management
  c        IP Multicast Traffic Management
  m        Port Mirroring Configuration
  f        File Up/Downloading Configuration
  r        System Reset Options
  l        System Log
  u        User Interface Configuration
  y        System Utility
  q        Return to previous menu


Command>
```

The **IntraCore Menu** is a text-based interface for telnet and console management.

IntraCore Web Management

Statistics

BarChart ▼ Apply

Since Up

Packets (Bytes)

00:00:08:37

Counter:
1. Total RX Pkts
2. Total RX Bytes
3. Good Broadcast
4. Good Multicast

1800
1500
1200
900
600
300
0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Counter

Port Selection

◄◄   ◄   ►

Port 1-16

○ Unit   ● Port
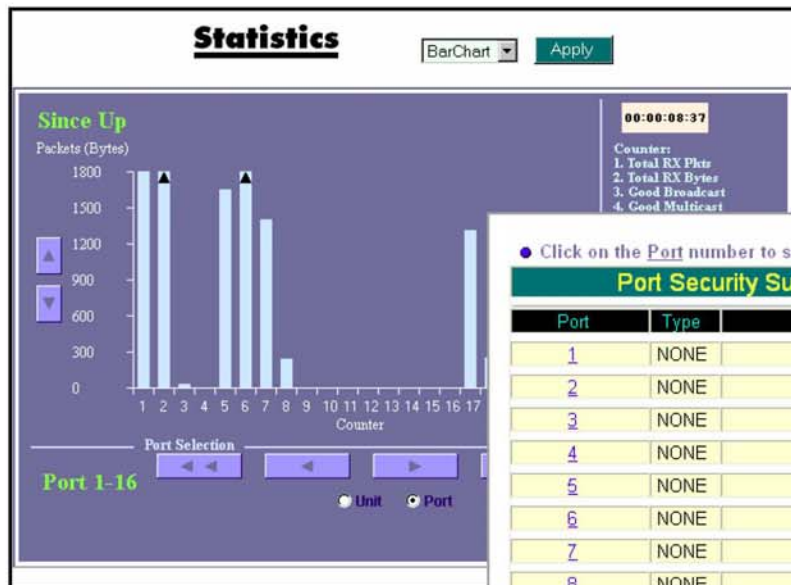
● Click on the <u>Port</u> number to set security level and action on Port configuration setting page.

Port Security Summary Table   (D - Disable T - Trap L - Log)

Port	Type	Action	Trusted MAC Addr
1	NONE	NONE	NONE
2	NONE	NONE	NONE
3	NONE	NONE	NONE
4	NONE	NONE	NONE
5	NONE	NONE	NONE
6	NONE	NONE	NONE
7	NONE	NONE	NONE
8	NONE	NONE	NONE
9	NONE	NONE	NONE
10	L 2	Trusted MAC Address Forwarding With Port Lock	First Learnt MAC Addr Entry
11	L 3	Trusted MAC Address Forwarding With Intruder Lock	First Learnt MAC Addr Entry

Port: 11

Port 1 ▼ GO   ● Auto ○ Manual   Refresh

Port Statistics

Link Status:	Up1000/FULL
Media Type:	GMII
Port Status:	Enable ▼
Auto-Negotiation:	Enable ▼
Flow Control:	Disable ▼
Port Default Priority:	0 - (Lowest) ▼

Security :

Level	3-Intruder lock MAC ▼
Intruder Detect Trap	Enable ▼
Trusted MAC:	First Learnt MAC Add

Apply   Restore

Rx Counters:
Total Frames: 776
Total Bytes: 272341
Dropped Frames: 0

Tx Counters:
Total Frames: 1339559
Total Bytes: 240873753
Unicast: 5928
Non-unicast: 1333631

Frame Counters:
Multicast: 31
Broadcast: 0
64 Byte

Errors:
Undersized Pkts:
Oversized Pkts:
CRC/Align:
Fragments:
FCS:
Late Events:
Total:

Asanté's web-based network management lets you easily define, view and monitor key device activities. The **Integrated Security Suite** (ISS) allows you to define multiple levels of port security and take pre-defined actions whenever an intruder is detected.

Highlights:

- Wire-speed, non-blocking, single chip design with 32 Gbps switch fabric.

- Choice of two configurations with 1000BaseT (copper) and GBIC (fiber or copper).

- Jumbo packets up to 16 KB.

- 1024 VLANs supported with IEEE802.1Q tagging.

- Optional redundant power supply (RPS).

- Layer 4 traffic classification using TCP/UDP ports.

- 802.1X with RADIUS authentication for securing wireless (or wired) clients.

- Sophisticated VLAN management using web management.

- Secure telnet management using SSH encryption.

- Integrated wiring loop detection.

- Assign port names.

- IGMP multicast querier.

- Save/restore settings in configuration file.

IC3548-2GT: 48-Port 10/100 with Dual Redundant Gigabit Ethernet
Imagine 52 network ports in a compact, 1U form factor. That's the IntraCore 3548-2GT, Asante's highest-density workgroup switch.

With 48 ports of 10/100 Fast Ethernet, you can connect four dozen desktops, printers and other peripherals. To uplink them to your dual Gigabit Ethernet backbone, choose 1000BaseT (copper) or GBIC (fiber). For added peace of mind, run 2 sets of both (redundant) copper and fiber Gigabit Ethernet cables and the IC3548-2GT will automatically failover to copper if the fiber has a link failure.

Highlights:

- Dual 1000BaseT (copper) and GBIC (fiber) uplinks.

- Auto-Failover provides redundant Gigabit uplinks.

- Up to 64 IEEE 801.1Q Virtual LANs (VLANs).

- Four IEEE 802.1p priority queues on each 10/100 port and 8 on each Gigabit port.

- Optional redundant power supply (RPS).

IC3524 Series: 24-Port 10/100 with Dual Uplink Options

The popular IntraCore 3524 Series is Asanté's most flexible, versatile workgroup switch. With two option slots for your choice of Fast Ethernet/Gigabit Ethernet over copper/fiber, this switch has been spec'ed into hundreds of schools, businesses, factories and other installations around the world.

To manage this switch, choose web, Telnet, console (serial) or SNMP. For larger installations with multiple IC3524 switches in a wiring closet, choose the unified "stacking" option to view all switches and ports as one logical unit.

Highlights
- Choice of 5 different uplink modules, including 1000BaseT, GBIC and 100BaseFX (single or multimode)
- Forwarding rate of 9.5 million packets per second at full wire speed over all network interfaces in a unit; 6.4 Gbps switch fabric (per unit) minimizes blocking and latency
- Up to 64 IEEE 801.1Q Virtual LANs (VLANs)

35516 SERIES SPECIFICATIONS *Layer 2/3/4, 16-Port Gigabit Ethernet Router*

Model	IC35516-G	IC35516-T
Part Number:*	99-00748-01	99-00749-01
Target Deployment:	Backbone aggregation	Backbone aggregation
Special Features:	Layer 2 switching,	Layer 2 switching,
	Layer 3 IP routing,	Layer 3 IP routing,
	Layer 2-4 filtering	Layer 2-4 filtering
Ports		
Gigabit Ethernet:	16	16
1000BaseT	4	16
GBIC	16	4
Auto-Failover (AF):	Yes	Yes
Auto-Uplink, MDI/MDIX (AU):	Yes (RJ45 ports)	Yes (RJ45 ports)
Performance		
Efficiency:	Non-blocking	Non-blocking
Switch Fabric:	32 Gbps, 24 MPPS	32 Gbps, 24 MPPS
Switch Design:	Integrated	Integrated
Jumbo Frames:	Up to 32 KB	Up to 32 KB
Link Aggregation:***	8 trunks/8 ports per trunk	8 trunks/8 ports per trunk
Forwarding (MAC) Table:	8 K addresses	8 K addresses
Integrated Security Suite		
Duplicate IP Address Detection:	Trap, log	Trap, log
New Node Detection:	Trap	Trap
Station Move Detection:	Yes	Yes
Trusted Port MAC Security:	First access or manual entry	First access or manual entry
Logical Security Locks:	Port lockdown or	Port lockdown or
	intruder lock (only)	intruder lock (only)
Physical Port Tampering:	Loop detection	Loop detection
Reliability		
Redundant Power Supply (RPS):	External (optional)	External (optional)
Auto-Failover (AF):	Ports 13, 14, 15 and 16	Ports 13, 14, 15 and 16
Firmware:	Dual banks	Dual banks
Network Standards		
IEEE 802.1D Spanning Tree and Bridge Filter:	Yes	Yes
IEEE 802.1p Class of Service Prioritization:	8 Queues/port	8 Queues/port
IEEE 802.1Q Virtual LAN (VLAN):	4000	4000
IEEE 802.3 10BaseT:	Yes	Yes
IEEE 802.3u 100BaseTX:	Yes	Yes
IEEE 802.3ab 1000BaseT:	Yes	Yes
IEEE 802.3z 1000BaseX:	Yes	Yes
RFC 1155 SMI:	Yes	Yes
RFC 1157 SNMP:	Yes	Yes
RFC 1212, 1213, 1215 MIB II and Traps:	Yes	Yes
RFC 1493 Bridge MIB:	Yes	Yes
RFC 1724 RIP v2 MIB:	Yes	Yes
RFC 1757 RMON:	4 Groups	4 Groups
RFC 2096 IP-Forward MIB:	Yes	Yes
RFC 2674 Bridge Extensions:	P-Bridge and Q-Bridge	P-Bridge and Q-Bridge
Asanté Private MIB:	Yes	Yes
Management		
Command line:	Industry-standard CLI	Industry-standard CLI
In-band:	Telnet or SNMP	Telnet or SNMP
Group:	Enterprise Device Manager**	Enterprise Device Manager**
Out-of-band:	Console	Console
Remote:	RMON	RMON

Model	IC35516-G	IC35516-T
IP Routing		
Router Standby Protocol:	Yes	Yes
Router Discovery Protocol:	Yes	Yes
RIP I/II:	Yes	Yes
Open Shortest Path First (OSPF):	Yes	Yes
Static Routing Table:	Insertion/Deletion	Insertion/Deletion
Multicasting:	IGMP v1 and v2DVMRP v3, 2K multicast groups	IGMP v1 and v2DVMRP v3, 2K multicast groups
Access Lists:	Standard and expanded	Standard and expanded
Address Resolution:	arp	arp
Message Logging to Syslog Server:	logging	logging
MAC Address Table Configuration:	mac-address-table	mac-address-table
Set Metric of Redistributed Routes:	default-metric	default-metric
Filter Networks in Routing Updates:	distribute-list	distribute-list
Specify Neighboring Router:	neighbor	neighbor
Modify RIP Distance Vector:	offset-list	offset-list
Redistribute Info from Another Protocol:	redistribute	redistribute
Adjust Routing Timers:	timers	timers
Selected Diagnostic Commands		
Reset Functions:	clear	clear
Manage System Clock:	clock	clock
Manage Files:	copy, erase	copy, erase
Send Echo Commands:	ping	ping
Trace Route to Destination:	tracert	tracert
Save Configuration:	write	write
Display Router Statistics:	show	show
Diagnose Router Events:	debug	debug
Physical		
Case:	Full rack width, metal	Full rack width, metal
Color:	Asanté BlackIce (432)	Asanté BlackIce (432)
Height:	1.5 U	1 U
	2.62'' / 6.7 cm	1.75'' / 4.45 cm
Mounting:	Rack or desk	Rack or desk
Rack Mount Kit:	Included	Included
Width x Length:	17.5 x 14.0'',	17.1 x 10.1'',
	44.5 x 35.6 cm	43.4 x 25.7 cm
Main Power Supply:	Internal	Internal
	100- 240 VAC	100- 240 VAC
	50/60 Hz	50/60 Hz
Redundant Power Supply (Emergency Backup):	External 12 VDC	External 12 VDC
	From 110/240 VAC	From 110/240 VAC

Environmental Range	
Operating Temperature:	32º to 104º F (0º to 40º C)
Relative Humidity:	10% to 95% non-condensing
Emissions:	FCC Class A and CE

Support	
Product Warranty:	3-year product warranty covers defects in manufacturing and workmanship
Technical Support:	3 years of telephone support plus 24-hour support via web
Supported Operating Systems:	Windows 95/98/Me/NT/2000/XP, Mac OS 9/X, and Linux

Accessories	
Redundant Power Supply:	IC35-EPS (99-00777-01)
1000BaseSX GBIC, Multimode SC Connector:	GBIC 1000SX (99-00609-01)
1000BaseLX GBIC, MM 1 KM, SM 10 KM:	GBIC 1000LX (99-00629-01)
1000BaseLH GBIC, Single Mode 20 KM:	GBIC 1000LH (99-00769-01)
1000BaseLZ GBIC, Single Mode 120 KM:	GBIC 1000LZ (99-00770-01)
1000BaseT GBIC, Cat5 100 M:	GBIC 1000T (99-00673-01)

35160 SERIES SPECIFICATIONS *16-Port Gigabit Ethernet Switch*

Model	IC35160-G	IC35160-T
Part Number:*	99-00716-01	99-00747-01
Target Deployment:	Backbone aggregation	Distribution switch
Special Features:***	Layer 2 switching, Layer 4 priority classification	Layer 2 switching, Layer 4 priority classification
Ports		
Gigabit Ethernet:	16	16
1000BaseT	4	16
GBIC	16	4
Auto-Failover (AF):	Yes	Yes
Auto-Uplink, MDI/MDIX (AU):	Yes (RJ45 ports)	Yes (RJ45 ports)
Performance		
Efficiency:	Non-blocking	Non-blocking
Switch Fabric:	32 Gbps, 24 MPPS	32 Gbps, 24 MPPS
Switch Design:	Integrated	Integrated
Jumbo Frames:	Up to 16 KB	Up to 16 KB
Link Aggregation:***	4 trucks, 4 ports/trunk	4 trucks, 4 ports/trunk
Traffic Priorities:***	4 traffic-based filters	4 traffic-based filters
Forwarding (MAC) Table:	2K addresses	2K addresses
Integrated Security Suite		
Secure Telnet:***	SSH Encryption	SSH Encryption
Duplicate IP Address Detection:	Trap, log	Trap, log
New Node Detection:	Trap	Trap
Station Move Detection:	Yes	Yes
Trusted Port MAC Security:	First access or manual entry	First access or manual entry
Logical Security Locks:	Port lockdown or intruder lock (only)	Port lockdown or intruder lock (only)
RADIUS Authentication:***	802.1X, 3 modes	802.1X, 3 modes
Physical Port Tampering:	Loop detection	Loop detection
Reliability		
Redundant Power Supply (RPS):	External (optional)	External (optional)
Auto-Failover (AF):	Ports 13, 14, 15 and 16	Ports 13, 14, 15 and 16
Firmware:	Dual banks	Dual banks
Network Standards		
IEEE 802.1D Spanning Tree and Bridge Filter:	Yes	Yes
IEEE 802.1p Class of Service Prioritization:	8 Queues/port	8 Queues/port
IEEE 802.1Q Virtual LAN (VLAN):	Yes	Yes
IEEE 802.1X Port-based Network Access:***	3 Settings	3 Settings
IEEE 802.3 10BaseT:	Yes	Yes
IEEE 802.3u 100BaseTX:	Yes	Yes
IEEE 802.3ab 1000BaseT:	Yes	Yes
IEEE 802.3z 1000BaseX:	Yes	Yes
RFC 1155 SMI:	Yes	Yes
RFC 1157 SNMP:	Yes	Yes
RFC 1212, 1213, 1215 MIB II and Traps:	Yes	Yes
RFC 1493 Bridge MIB:	Yes	Yes
RFC 1757 RMON:	4 Groups	4 Groups
RFC 2674 Bridge Extensions:	P-Bridge and Q-Bridge	P-Bridge and Q-Bridge
RFC 2284 PPP EAP:***	Yes	Yes
RFC 2865 Remote Authentication (RADIUS):***	Yes	Yes
RFC 2869 RADIUS Extensions:***	Yes	Yes
Asanté Private MIB:	Yes	Yes

Model	IC35160-G	IC35160-T
Management		
Command Line:	IntraCore menu	IntraCore menu
In-band:	Web, Telnet or SNMP	Web, Telnet or SNMP
Group:	Enterprise Device Manager**	Enterprise Device Manager**
Out-of-band:	Console	Console
Remote:	RMON	RMON
Virtual LAN (VLAN)		
Maximum VLANs:	1K	1K
Port VID range:	1 to 4K	1 to 4K
Learning:	IVL	IVL
Spanning Tree Protocol (STP):	Span multiple VLANs	Span multiple VLANs
Management:	SNMP, console, web	SNMP, console, web
Management Security:	Yes	Yes
Physical		
Case:	Full rack width, metal	Full rack width, metal
Color:	Asanté BlackIce (432)	Asanté BlackIce (432)
Height:	1.5 U	1 U
	2.62" / 6.7 cm	1.75" / 4.45 cm
Mounting:	Rack or desk	Rack or desk
Rack Mount Kit:	Included	Included
Width x Length:	17.5 x 14.0",	17.1 x 10.1",
	44.5 x 35.6 cm	43.4 x 25.7 cm
Main Power Supply:	Internal	Internal
	100- 240 VAC	100- 240 VAC
	50/60 Hz	50/60 Hz
Redundant Power Supply (RPS)):	External 12 VDC	External 12 VDC
	From 110/240 VAC	From 110/240 VAC
Environmental Range		
Operating Temperature:	32º to 104º F (0º to 40º C)	
Relative Humidity:	10% to 95% non-condensing	
Emissions:	FCC Class A and CE	
Support		
Product Warranty:	3-year product warranty covers defects in manufacturing and workmanship	
Technical Support:	3 years of telephone support plus 24-hour support via web	
Supported Operating Systems:	Windows 95/98/Me/NT/2000/XP, Mac OS 9/X, and Linux; Windows XP required for 802.1X	
Accessories		
Redundant Power Supply:	IC35-EPS (99-00777-01)	
1000BaseSX GBIC, Multimode SC Connector:	GBIC 1000SX (99-00609-01)	
1000BaseLX GBIC, MM 1 KM, SM 10 KM:	GBIC 1000LX (99-00629-01)	
1000BaseLH GBIC, Single Mode 20 KM:	GBIC 1000LH (99-00769-01)	
1000BaseLZ GBIC, Single Mode 120 KM:	GBIC 1000LZ (99-00770-01)	
1000BaseT GBIC, Cat5 100 M:	GBIC 1000T (99-00673-01)	

Asanté offers a full line of industry-standard Gigabit Interface Converters (GBIC)

3548 SPECIFICATIONS *48-Port 10/100 Switch*

Model	IC3548-2GT
Part Number:*	99-00663-01
Target Deployment:	Workgroup
Ports	
Fast Ethernet	48
Gigabit Ethernet:	2
1000BaseT	2
GBIC	2
Auto-Failover (AF):	Yes
Auto-Uplink, MDI/MDIX (AU):	Yes (RJ45 ports)
Performance	
Efficiency:	Segmented
Switch Fabric:	12.8 Gbps
Switch Design:	Dual-chip
Integrated Security Suite	
Duplicate IP Address Detection:	Trap, log
New Node Detection:	Trap
Station Move Detection:	Yes
Trusted Port MAC Security:	First access or manual entry
Logical Security Locks:	Port lockdown or intruder lock (only)
Physical Port Tampering:	Loop detection
Reliability	
Redundant Power Supply (RPS):	External (optional)
Auto-Failover (AF):	Gigabit Ports
Firmware:	Dual banks
Network Standards	
IEEE 802.1D Spanning Tree and Bridge Filter:	Yes
IEEE 802.1p Class of Service Prioritization:	8 Queues per Gigabit port
	4 Queues per 10/100 port
IEEE 802.1Q Virtual LAN (VLAN):	Yes
IEEE 802.3 10BaseT:	Yes
IEEE 802.3u 100BaseTX:	Yes
IEEE 802.3ab 1000BaseT:	Yes
IEEE 802.3z 1000BaseX:	Yes
RFC 1155 SMI:	Yes
RFC 1157 SNMP:	Yes
RFC 1212, 1213, 1215 MIB II and Traps:	Yes
RFC 1493 Bridge MIB:	Yes
RFC 1757 RMON:	4 Groups
RFC 2674 Bridge Extensions:	P-Bridge and Q-Bridge
Asanté Private MIB:	Yes
Management	
Command Line:	IntraCore menu
In-band:	Web, Telnet or SNMP
Group:	Enterprise Device Manager**
Out-of-band:	Console
Remote:	RMON

* For international part numbers, please refer to the Asante price list. ** Requires Windows 98/Me or XP. Beta version on www.asante.com

Model	IC3548-2GT
Virtual LAN (VLAN)	
Maximum VLANs:	64
Port VID range:	1 to 4K
Learning:	SVL
Spanning Tree Protocol (STP):	Span multiple VLANs
Management:	SNMP, console, web
Management Security:	Yes
Physical	
Case:	Full rack width, metal
Color:	Asanté BlackIce (432)
Height:	1 U
	1.8" / 4.6 cm
Mounting:	Rack or desk
Rack Mount Kit:	Included
Width x Length:	17.5 x 10.0"
	44.5 x 25.4 cm
Main Power Supply:	Internal 100- 240 VAC, 50/60 Hz
Redundant Power Supply (RPS):	External 12 VDC from 110/240 VAC
Environmental Range	
Operating Temperature:	32º to 104º F (0º to 40º C)
Relative Humidity:	10% to 95% non-condensing
Emissions:	FCC Class A and CE
Support	
Product Warranty:	3-year product warranty covers
	defects in manufacturing and workmanship
Technical Support:	3 years of telephone support plus 24-hour support via web
Supported Operating Systems:	Windows 95/98/Me/NT/2000/XP, Mac OS 9/X, and Linux
Accessories	
Redundant Power Supply:	IC35-EPS (99-00777-01)
1000BaseSX GBIC, Multimode SC Connector:	GBIC 1000SX (99-00609-01)
1000BaseLX GBIC, MM 1 KM, SM 10 KM:	GBIC 1000LX (99-00629-01)
1000BaseLH GBIC, Single Mode 20 KM:	GBIC 1000LH (99-00769-01)
1000BaseLZ GBIC, Single Mode 120 KM:	GBIC 1000LZ (99-00770-01)

Dual power sources: redundant (left) and primary (right)

3524 SERIES SPECIFICATIONS *24-Port 10/100 Switch with Gigabit Uplinks*

Model	IC3524 Base	IC3524-2T	IC3524-2G
Part Number:*	99-00663-01	99-00679-01	99-00677-01
Target Deployment:	Workgroup	Workgroup	Workgroup
Ports			
Fast Ethernet:	24	24	24
Gigabit Ethernet:	Optional	2	2
1000BaseT	Optional (IC35-1000T)	2	--
GBIC	Optional (IC35-GBIC)	--	2
1000BaseSX	Optional (IC35-1000SX)	--	--
100BaseFX Fiber:	Optional (IC35-100MMFX, IC35-100SMFX)	--	--
Stacking:	Optional (IC35-STK)	--	--
Auto-Uplink, MDI/MDIX (AU):	Yes (RJ45 ports)	Yes (RJ45 ports)	Yes (RJ45 ports)
Performance			
Efficiency:	Non-blocking	Non-blocking	Non-blocking
Switch Fabric:	6.4 Gbps, 9.5 MPPS	6.4 Gbps, 9.5 MPPS	6.4 Gbps, 9.5 MPPS
Switch Design:	Integrated	Integrated	Integrated
Integrated Security Suite			
Duplicate IP Address Detection:	Trap, log	Trap, log	Trap, log
New Node Detection:	Trap	Trap	Trap
Station Move Detection:	Yes	Yes	Yes
Trusted Port MAC Security:	First access or manual entry	First access or manual entry	First access or manual entry
Logical Security Locks:	Port lockdown or intruder lock (only)	Port lockdown or intruder lock (only)	Port lockdown or intruder lock (only)
Physical Port Tampering:	Loop detection	Loop detection	Loop detection
Reliability			
Stacking:	Optional	Optional	Optional
Firmware:	Dual banks	Dual banks	Dual banks
Network Standards			
IEEE 802.1D Spanning Tree and Bridge Filter:	Yes	Yes	Yes
IEEE 802.1p Class of Service Prioritization:	8 Queues per Gigabit port 4 Queues per 10/100 port	8 Queues per Gigabit port 4 Queues per 10/100 port	8 Queues per Gigabit port 4 Queues per 10/100 port
IEEE 802.1Q Virtual LAN (VLAN):	Yes	Yes	Yes
IEEE 802.3 10BaseT:	Yes	Yes	Yes
IEEE 802.3u 100BaseTX:	Yes	Yes	Yes
IEEE 802.3ab 1000BaseT:	Yes	Yes	Yes
IEEE 802.3z 1000BaseX:	Yes	Yes	Yes
RFC 1155 SMI:	Yes	Yes	Yes
RFC 1157 SNMP:	Yes	Yes	Yes
RFC 1212, 1213, 1215 MIB II and Traps:	Yes	Yes	Yes
RFC 1493 Bridge MIB:	Yes	Yes	Yes
RFC 1757 RMON:	4 Groups	4 Groups	4 Groups
RFC 2674 Bridge Extensions:	P-Bridge and Q-Bridge	P-Bridge and Q-Bridge	P-Bridge and Q-Bridge
Asanté Private MIB:	Yes	Yes	Yes
Management			
Command Line:	IntraCore menu	IntraCore menu	IntraCore menu
In-band:	Web, Telnet or SNMP	Web, Telnet or SNMP	Web, Telnet or SNMP
Group:	Enterprise Device Manager**	Enterprise Device Manager**	Enterprise Device Manager**
Out-of-band:	Console	Console	Console
Remote:	RMON	RMON	RMON

* For international part numbers, please refer to the Asante price list. ** Requires Windows 98/Me or XP. Beta version on www.asante.com

Model	IC3524 Base	IC3524-2T	IC3524-2G
Virtual LAN (VLAN)			
Maximum VLANs:	64	64	1K
Port VID range:	1 to 4K	1 to 4K	1 to 4K
Learning:	SVL	SVL	SVL
Spanning Tree Protocol (STP):	Span multiple VLANs	Span multiple VLANs	Span multiple VLANs
Management:	SNMP, console, web	SNMP, console, web	SNMP, console, web
Management Security:	Yes	Yes	Yes
MAC Address:	Insertion/Deletion	Insertion/Deletion	Insertion/Deletion
Physical			
Case:	Full rack width, metal	Full rack width, metal	Full rack width, metal
Color:	Asanté BlackIce (432)	Asanté BlackIce (432)	Asanté BlackIce (432)
Height:	1 U	1 U	1 U
	1.75" / 4.45 cm	1.75" / 4.45 cm	1.75" / 4.45 cm
Mounting:	Rack or desk	Rack or desk	Rack or desk
Rack Mount Kit:	Included	Included	Included
Width x Length:	17.5 x 14.0"	17.5 x 14.0"	17.1 x 10.1"
	44.5 x 35.6 cm	44.5 x 35.6 cm	43.4 x 25.7 cm
Power Supply:	Internal	Internal	Internal
	100- 240 VAC	100- 240 VAC	100- 240 VAC
	50/60 Hz	50/60 Hz	50/60 Hz

Environmental Range	
Operating Temperature:	32º to 104º F (0º to 40º C)
Relative Humidity:	10% to 95% non-condensing
Emissions:	FCC Class A and CE

Support	
Product Warranty:	3-year product warranty covers defects in manufacturing and workmanship
Technical Support:	3 years of telephone support plus 24-hour support via web
Supported Operating Systems:	Windows 95/98/Me/NT/2000/XP, Mac OS 9/X, and Linux

Accessories	
1000BaseX GBIC Holder Module	IC35-GBIC (99-00682-01)
10/100/1000BaseT Switch Port Module	IC35-1000T (99-00681-01)
1000BaseSX Switch Port Module	IC35-1000SX (99-00691-01)
100BaseFX Multi-Mode Fiber Switch Port Module	IC35-100MMFX (99-00692-01)
IC3524 Stacking Kit (2 modules,0.5M cable)	IC35-SKT (99-00710-01)
1000BaseSX GBIC, Multimode SC Connector:	GBIC 1000SX (99-00609-01)
1000BaseLX GBIC, MM 1 KM, SM 10 KM:	GBIC 1000LX (99-00629-01)
1000BaseLH GBIC, Single Mode 20 KM:	GBIC 1000LH (99-00769-01)
1000BaseLZ GBIC, Single Mode 120 KM:	GBIC 1000LZ (99-00770-01)

Fiber/copper and 10/100/Gigabit modules for IC3524

Asante